

Title (en)

Method of manufacturing foamed vehicle component as well as roof module or vehicle ceiling made thereby

Title (de)

Verfahren zum Herstellen eines geschäumten Fahrzeugteils sowie dadurch hergestelltes Dachmodul oder dadurch hergestellter Fahrzeuginnenhimmel

Title (fr)

Procédé de production d'un composant moussé pour véhicule et un module de toit ou un pavillon de véhicule produit par ledit procédé

Publication

**EP 1491312 A3 20070221 (DE)**

Application

**EP 04011540 A 20040514**

Priority

DE 10328045 A 20030623

Abstract (en)

[origin: EP1491312A2] The method involves holding profiles (16) in a foaming tool using a magnetic force. A liquid plastic material is introduced into the foaming tool. The liquid plastic material is foamed to form a foamed layer (12), where the profiles are embedded into the foamed layer. A decorative part (10) is placed inside the foaming tool between the profiles and an inner side of the foaming tool. An independent claim is also included for a roof module for a vehicle.

IPC 8 full level

**B29C 33/32** (2006.01); **B29C 33/16** (2006.01); **B29C 44/12** (2006.01); **B60R 13/02** (2006.01); **B60R 11/00** (2006.01); **B60R 11/02** (2006.01)

CPC (source: EP US)

**B29C 33/16** (2013.01 - EP US); **B29C 44/1271** (2013.01 - EP US); **B60R 13/0225** (2013.01 - EP US); **B29C 44/14** (2013.01 - EP); **B60R 11/0235** (2013.01 - EP US); **B60R 2011/0084** (2013.01 - EP US); **B60R 2013/0287** (2013.01 - EP US)

Citation (search report)

- [XY] JP S61100424 A 19860519 - MITSUBISHI PLASTICS IND
- [X] EP 1227028 A2 20020731 - OPEL ADAM AG [DE]
- [Y] GB 1417631 A 19751210 - STOBERL H
- [A] WO 9956932 A1 19991111 - BUFFALO MOLDED PLASTICS INC [US]
- [A] DE 4202511 C1 19930506
- [A] DE 3908106 A1 19900830 - ELDRA KUNSTSTOFFTECHNIK GMBH [DE]
- [A] DE 2007430 A1 19710902 - HERMANN WIEBEL DAMPFSÄGEWERK
- [A] US 5771645 A 19980630 - PORTER WILLIAM H [US]
- [X] DATABASE WPI Week 198925, Derwent World Patents Index; AN 1989-182367, XP002413910

Cited by

DE102005031395B4; FR2900377A1; DE102004057810B4; DE102004057810A1

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Designated extension state (EPC)

AL HR LT LV MK

DOCDB simple family (publication)

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